Application Number: 10/621,970
Reply to O.A. of February 14, 2007

Amendments to the claims

Dkt. No.: 33333/US

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) An administering apparatus with a dosage display, comprising:

- a) a casing comprising a front casing section and a rear casing section, and a reservoir for a fluid product, wherein the front casing section and the rear casing section are plugged into each other along a common central longitudinal axis, in a non-releasable connection, whereby the front casing section and the rear casing section cannot be moved relative to each other, either axially or rotationally about the longitudinal axis;
- b) a driven device which acts on said product contained in said reservoir, in order to deliver product;
- c) a dosing means, using which a product dosage to be delivered can be selected, and which comprises a dosage scale with a number of dosage marks axially spaced out from each other; and
- d) a drive device coupled to said driven device for driving the driven device, said drive device performing a delivery stroke from an initial position, in a drive direction, up to a delivery stopper, the length of said delivery stroke counter to the drive direction being limited by selecting the product dosage by means of said dosing means;
- e) wherein said casing is transparent, at least in an area overlapping said dosage scale; and wherein
- f) the drive device carries an indicator marking, in order to indicate the initial position of the drive device through the transparent area of the casing, relative to said dosage marks;
- g) the driven device comprises a piston and a piston rod acting on the piston in the drive direction to deliver product from the reservoir by axially moving the piston in the drive direction, wherein the drive device is moveable counter to the drive direction as far as an adjustable dosing stopper, and the piston rod is prevented from moving counter to the drive direction and is coupled to the drive device such that it is slaved by the drive device in the drive direction; and wherein

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an outer surface of the piston rod comprises rows of teeth, the rear casing section h) comprising blocking elements which engage the rows of teeth such that the piston rod is permitted to move in an advancing direction but not counter to the advancing direction.

- (Original) The administering apparatus as set forth in claim 1, wherein the dosing means 2. comprises another indicator, in order to display the product dosage selected on the dosage scale or on another dosage scale.
- (Currently amended) An administering apparatus with a dosage display, comprising: 3.
- a casing comprising a front casing section and a rear casing section, and a a) reservoir for a fluid product, wherein the front casing section and the rear casing section are plugged into each other along a common central longitudinal axis, in a non-releasable connection, whereby the front casing section and the rear casing section cannot be moved relative to each other, either axially along or rotationally about the longitudinal axis;
- a driven device which acts on said product contained in said reservoir, in order to b) deliver product;
- a dosing means, using which a product dosage to be delivered can be selected, and c) which comprises a dosage scale with a number of dosage marks axially spaced out from each other; and
- a drive device coupled to said driven device for driving the driven device, said d) drive device performing a delivery stroke from an initial position, in a drive direction, up to a delivery stopper, the length of said delivery stroke counter to the drive direction being limited by selecting the product dosage by means of said dosing means;
- wherein said casing is transparent, at least in an area overlapping said dosage e) scale;
- wherein the drive device carries an indicator marking, in order to indicate the f) initial position of the drive device through the transparent area of the casing, relative to said dosage marks;
- wherein the dosing means comprises another indicator, in order to display the g) product dosage selected on the dosage scale or on another dosage scale; and wherein

h) said indicator marking of the drive device and said other indicator overlap in the initial position of the drive device, if the drive device can perform the maximum stroke, set by selecting the product dosage, from the initial position;

- i) the driven device comprises a piston and a piston rod acting on the piston in the drive direction to deliver product from the reservoir by axially moving the piston in the drive direction, the drive device moveable counter to the drive direction to an adjustable dosing stopper, and the piston rod is prevented from moving counter to the drive direction and is coupled to the drive device such that it is slaved by the drive device in the drive direction; and wherein
- j) an outer surface of the piston rod comprises rows of teeth, the rear casing section comprising blocking elements which engage the rows of teeth whereby the piston rod is permitted to move in an advancing direction but not against the advancing direction.
- 4. (Original) The administering apparatus as set forth in claim 1, wherein the dosing means comprises a dosing member which performs a dosing movement relative to the casing, in order to select the product dosage to be delivered, and wherein the position of said dosing member is displayed on the dosage scale or on another dosage scale.
- 5. (Original) The administering apparatus as set forth in claim 4, wherein the dosing member is coupled to the casing such that it can be rotated about a rotational axis pointing in the drive direction.
- 6. (Currently amended) An administering apparatus with a dosage display, comprising:
- a) a casing comprising <u>a front casing section and a rear casing section, and a</u> reservoir for a fluid product, <u>wherein the front casing section and the rear casing section are non-releaseably connected to each other along a common central longitudinal axis, and cannot be moved relative to each other, either axially along or rotationally about the longitudinal axis;</u>
- b) a driven device which acts on said product contained in said reservoir, in order to deliver product;

c) a dosing means, using which a product dosage to be delivered can be selected, and which comprises a dosage scale with a number of dosage marks axially spaced out from each other; and

- d) a drive device coupled to said driven device for driving the driven device, said drive device performing a delivery stroke from an initial position, in a drive direction, up to a delivery stopper, the length of said delivery stroke counter to the drive direction being limited by selecting the product dosage by means of said dosing means;
- e) wherein said casing is transparent, at least in an area overlapping said dosage scale;
- f) wherein the drive device carries an indicator marking, in order to indicate the initial position of the drive device through the transparent area of the casing, relative to said dosage marks;
- g) wherein the dosing means comprises a dosing member which performs a dosing movement relative to the casing, in order to select the product dosage to be delivered, and wherein the position of said dosing member is displayed on the dosage scale or on another dosage scale; and wherein
- h) the dosing member and the casing are coupled via a swivel joint, such that a rotational movement of the dosing member about a rotational axis pointing in the drive direction causes an axial translational movement of the dosing member;
- i) the driven device comprises a piston and a piston rod acting on the piston in the drive direction to deliver product from the reservoir by axially moving the piston in the drive direction, the drive device moveable counter to the drive direction to an adjustable dosing stopper, and the piston rod is prevented from moving counter to the drive direction and is coupled to the drive device such that it is slaved by the drive device in the drive direction; and wherein
- j) an outer surface of the piston rod comprises rows of teeth, the rear casing section comprising blocking elements which engage the rows of teeth such that the piston rod is permitted to move in an advancing direction but not counter to the advancing direction.
- 7. (Currently amended) An administering apparatus with a dosage display, comprising:

a) a casing comprising <u>a front casing section and a rear casing section</u>, and a reservoir for a fluid product, <u>wherein the front casing section and the rear casing section are plugged into each other along a common central longitudinal axis in a non-releasable connection, whereby the front casing section and the rear casing section cannot be moved relative to each other, either axially along or rotationally about the longitudinal axis;</u>

- b) a driven device which acts on said product contained in said reservoir, in order to deliver product;
- c) a dosing means, using which a product dosage to be delivered can be selected, and which comprises a dosage scale with a number of dosage marks axially spaced out from each other; and
- d) a drive device coupled to said driven device for driving the driven device, said drive device performing a delivery stroke from an initial position, in a drive direction, up to a delivery stopper, the length of said delivery stroke counter to the drive direction being limited by selecting the product dosage by means of said dosing means;
- e) wherein said casing is transparent, at least in an area overlapping said dosage scale;
- f) wherein the drive device carries an indicator marking, in order to indicate the initial position of the drive device through the transparent area of the casing, relative to said dosage marks; and wherein
- g) the dosing means comprises a dosing member comprising an inner dosing body and an outer dosing body, between which a gap is formed into which the casing protrudes, wherein said inner dosing body forms a dosing stopper for selecting the product dosage, wherein said dosing stopper can be adjusted in or counter to the drive direction by operating said outer dosing body;
- h) the driven device comprises a piston and a piston rod acting on the piston in the drive direction to deliver product from the reservoir by axially moving the piston in the drive direction, the drive device moveable counter to the drive direction up to an adjustable dosing stopper, and the piston rod prevented from moving counter to the drive direction and slaved to the drive device in the drive direction; and wherein

<u>i)</u> an outer surface of the piston rod comprises rows of teeth and the rear casing section comprises blocking elements which engage the rows of teeth whereby the piston rod is moveable in an advancing direction but not counter to the advancing direction.

- 8. (Currently amended) An administering apparatus with a dosage display, comprising:
- a) a casing comprising <u>a front casing section and a rear casing section</u>, and a reservoir for a fluid product, <u>wherein the front casing section and the rear casing section are non-releaseably connected along a common central longitudinal axis and cannot be moved relative to each other axially along or rotationally about the longitudinal axis;</u>
- b) a driven device which acts on said product contained in said reservoir, in order to deliver product;
- c) a dosing means, using which a product dosage to be delivered can be selected, and which comprises a dosage scale with a number of dosage marks axially spaced out from each other; and
- d) a drive device coupled to said driven device for driving the driven device, said drive device performing a delivery stroke from an initial position, in a drive direction, up to a delivery stopper, the length of said delivery stroke counter to the drive direction being limited by selecting the product dosage by means of said dosing means;
- e) wherein said casing is transparent, at least in an area overlapping said dosage scale;
- f) wherein the drive device carries an indicator marking, in order to indicate the initial position of the drive device through the transparent area of the casing, relative to said dosage marks; and wherein
- g) the dosing means comprises a dosing member which forms a dosing stopper, can be moved counter to the drive direction up to the drive device, and is movably coupled to the casing, in order to select the product dosage by adjusting said dosing stopper relative to the casing:
- h) the driven device comprises a piston and a piston rod acting on the piston in the drive direction to deliver product from the reservoir by axially moving the piston in the drive direction, the drive device moveable counter to the drive direction to an adjustable dosing stopper, and the piston rod is prevented from moving counter to the drive direction and is

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coupled to the drive device such that it is slaved by the drive device in the drive direction; and wherein

<u>i)</u> an outer surface of the piston rod comprises rows of teeth, and the rear casing section comprises blocking elements which engage the rows of teeth such that the piston rod is permitted to move in an advancing direction but not counter to the advancing direction.

9. (Cancelled)

- 10. (Original) The administering apparatus as set forth in claim 1, wherein the dosage marks are also spaced out from each other in the circumferential direction, around an axis pointing in the drive direction.
- 11. (Original) The administering apparatus as set forth in claim 1, wherein the casing is a support for the dosage scale for displaying the initial position of the drive device.
- 12. (Original) The administering apparatus as set forth in claim 1, wherein the dosing means comprises a dosing member which performs a dosing movement relative to the casing, in order to select the product dosage to be delivered, and forms another indicator which displays the product dosage selected on the dosage scale or another dosage scale.
- 13. (Original) The administering apparatus as set forth in claim 1, wherein the dosage scale serving to display the initial position of the drive device comprises a clearly assigned dosage symbol for at least a part of the dosage marks, said dosage symbol representing a product dosage corresponding to the assigned dosage mark.
- 14. (Previously presented) The administering apparatus as set forth in claim 1, wherein the drive device comprises a marking line on an outer surface area facing the casing, said marking line extending perpendicular to the drive direction and forming the indicator marking of the drive device.

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Reply to O.A. of February 14, 2007 (Original) The administering apparatus as set forth in claim 1, wherein the dosage marks

are formed by lines which extend perpendicular to the drive direction.

(Original) The administering apparatus as set forth in claim 1, wherein said 16.

administering apparatus is an injection apparatus comprising an injection cannula of at most 30

gauge, or an injection cannula having an outer diameter of at most 320 µm and an inner diameter

not specified in ISO 9626, wherein the wall thickness is thinner than is specified in ISO 9626.

(Original) The administering apparatus as set forth in claim 16, wherein said injection 17.

cannula is 31 or 32 gauge.

18. (Cancelled)

15.

(Currently amended) The administering apparatus as set forth in claim 1 [[18]], wherein 19.

the drive device performs a delivery stroke in a drive direction and can only be moved relative to

the driven device opposite the drive direction, by a path length which corresponds to a remaining

dosage in the reservoir.

(Previously presented) The administering apparatus as set forth in claim 1, wherein said 20.

rear casing section is transparent.

(Previously presented) The administering apparatus as set forth in claim 1, wherein said 21.

reservoir for said product is a disposable module, and at least one of said front or rear casing

sections is disposable.

22-26. (Cancelled)

(Previously presented) The administering apparatus as set forth in claim 3, wherein said 27.

reservoir for said product is a disposable module, and a portion of said casing is disposable.

(Previously presented) The administering apparatus as set forth in claim 7, wherein the 28.

dosage marks are also spaced out from each other in the circumferential direction, around an axis

pointing in the drive direction.

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29. (Previously presented) The administering apparatus as set forth in claim 7, wherein the dosage scale serving to display the initial position of the drive device comprises a clearly

assigned dosage symbol for at least a part of the dosage marks, said dosage symbol representing

a product dosage corresponding to the assigned dosage mark.

30. (Previously presented) The administering apparatus as set forth in claim 7, wherein the

drive device comprises a marking line on an outer surface area facing the casing, said marking

line extending perpendicular to the drive direction and forming the indicator marking of the drive

device.

31. (Previously presented) The administering apparatus as set forth in claim 7, wherein the

dosage marks are formed by lines which extend perpendicular to the drive direction.

32. (Previously presented) The administering apparatus as set forth in claim 8, wherein said

administering apparatus is an injection apparatus comprising an injection cannula of at most 30

gauge, or an injection cannula having an outer diameter of at most 320 µm and an inner diameter

not specified in ISO 9626, wherein the wall thickness is thinner than is specified in ISO 9626.

33. (Previously presented) The administering apparatus as set forth in claim 32, wherein said

injection cannula is 31 or 32 gauge.

34. (Currently amended) The administering apparatus as set forth in claim 8 [[9]], wherein

the casing is a support for the dosage scale for displaying the initial position of the drive device.

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